November 20, 2001

Mr. David Sulc
Nucor Steel
Route 2, Box 311
Crawfordsville, IN 47933

Re: 107-14935
First Administrative Amendment to
Part 70 Significant Source PSD Modification
107-12143-00038

Dear Mr. Sulc:

Nucor Steel was issued a PSD permit on January 19, 2001 for construction of a steel strip caster operation. A letter requesting an administrative amendment was received on September 11, 2001. Pursuant to the provisions of 326 IAC 2-7-11 the permit is hereby administratively amended as follows:

The changes include:

(a) The total MMBTU/hr for all the natural gas combustion equipment used for the strip caster plant has been reduced from 107 MMBTU/hr to 81 MMBTU/hr.

(b) Dimensions of the strip caster buildings.

(c) Location of the contact cooling tower and inclusion of the number of cells six (6). Location of the non-contact cooling tower and inclusion of the number of cells four (4).

The total emissions were reduced due to the reduction in total MMBTU/hr for the entire project. Since building dimensions (heights) have changed, a dispersion modeling analysis was conducted to demonstrate the modification continues to comply with the PSD increments and national ambient air quality standards (NAAQS). The Technical Support and Modeling Section of Office of Air Quality (OAQ) reviewed Nucor Steels' dispersion modeling analyses submitted with this permit application. The Technical Support and Modeling Section has determined that the model results demonstrate compliance with the PSD increments and national ambient air quality standards.

These changes have resulted in no changes in any of the PSD limits. Based on this, the following changes are made to the PSD permit (new language is bolded for emphasis and old language is struck out).

A.2 **Emissions Units and Control Equipment**

(b) Combustion equipment associated with the strip caster plant:

(1) Two (2) natural gas-fired ladle preheaters identified as LP-1 and LP-2 and one

(1) natural gas-fired ladle dryer identified as LD-1. Each ladle preheater and dryer shall be equipped with low-NOx burners, shall not exceed a maximum heat input rate of ~~15~~ **12** MMBTU per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21;

(2) Two (2) natural gas-fired tundish preheaters identified as TP-1 and TP-2. Each tundish preheater shall be equipped with oxy-fuel burners, shall not exceed a maximum heat input rate of ~~6~~ **10** MMBTU per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21;

(3) Two (2) natural gas-fired tundish nozzle preheaters identified as TNP-1 and TNP-2. Each tundish nozzle preheater shall be equipped with low-NOx burners, shall not exceed a maximum heat input rate of 1.0 MMBTU per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21;

(4) **One (1)** ~~Two (2)~~ natural gas-fired tundish dryer~~s~~ identified as TD-1. ~~and TD-2.~~ **The** ~~Each~~ tundish dryer shall be equipped with low-NOx burners, **and** shall not exceed a maximum heat input rate of **4** ~~9~~ MMBTU per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21; and

(5) **Two (2)** natural gas-fired transition piece preheaters, utilizing propane as back up fuel. Each preheater shall be equipped with low-NOx burners and not exceed a total heat input capacity of **2** ~~15~~ MMBTU per hour. These preheaters shall be used in the tundish operations located on the caster deck.

(c) Ancillary equipment associated with the strip caster plant:

(1) One (1) LMS baghouse dust loading silo equipped with a bin vent filter, or equivalent, for material recovery and particulate matter control. The emissions from the LMS dust handling equipment shall also be controlled by the silo bin vent filter. Nucor may install an equivalent, enclosed system to store dust from the LMS;

(2) Dumping, storage, and transfer operations of raw materials for the strip caster plant;

(3) Additional transport on new or existing paved roadways and parking lots, unpaved roadways, and unpaved areas around existing raw material storage piles;

(4) One (1) contact cooling tower system with **six (6) cells and** a maximum water flow rate of 12,000 gallons per minute and one (1) non-contact cooling tower system with **four (4) cells and** a maximum water flow rate of 12,000 gallons per minute; and

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(b) Combustion equipment associated with the strip caster plant:

(1) Two (2) natural gas-fired ladle preheaters identified as LP-1 and LP-2 and one (1) natural gas-fired ladle dryer identified as LD-1. Each ladle preheater and dryer shall be equipped with low-NOx burners, shall not exceed a maximum heat input rate of ~~15~~ **12** MMBTU per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21;

(2) Two (2) natural gas-fired tundish preheaters identified as TP-1 and TP-2. Each tundish preheater shall be equipped with oxy-fuel burners, shall not exceed a maximum heat input rate of ~~6~~ **10** MMBTU per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21;

(3) Two (2) natural gas-fired tundish nozzle preheaters identified as TNP-1 and TNP-2. Each tundish nozzle preheater shall be equipped with low-NOx burners, shall not exceed a maximum heat input rate of 1 MMBTU per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21;

(4) **One (1)** ~~Two(2)~~ natural gas-fired tundish dryer~~s~~ identified as TD-1. ~~and TD-2~~. **The** ~~Each~~ tundish dryer shall be equipped with low-NOx burners, **and** shall not exceed a maximum heat input rate of **4** ~~9~~ MMBTU per hour, and have the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21; and

(5) **Two (2)** natural gas-fired transition piece preheaters, utilizing propane as back up fuel. Each preheater shall be equipped with low-NOx burners and not exceed a total heat input capacity of 2 MMBTU per hour. These preheaters shall be used in the tundish operations located on the caster deck.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.2.1 Nitrogen Oxides (NO_x) Emission Limitations

(a) Pursuant to 326 IAC 2-2 (PSD Requirements), the above-mentioned combustion units shall comply with the following requirements:

(1) Each combustion facility shall utilize natural gas as the primary fuel and may utilize propane as a backup fuel; and

(2) The combustion facilities shall comply with the following:

Combustion Facility	No. Units	Max Heat Input Rate (MMBTU/hr)	Burner Type (or equivalent)	NOx Emission Limit (lb NOx/MMBTU)
Ladle Preheater	2	~~15~~ **12** each	Low-NOx	0.10
Ladle Dryer	1	~~15~~ **12**	Low-NOx	0.10
Tundish Preheater	2	~~6~~ **10** each	Oxy-Fuel	0.15
Tundish Nozzle Preheater	2	1 each	Low-NOx	0.10
Tundish Dryer	~~2~~ **1**	~~9~~ **4**	Low-NOx	0.10
Transition Piece Preheaters	~~1~~ **2**	~~15~~ **2** each	Low-NOx	0.10

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(c) Ancillary equipment associated with the strip caster plant:

(1) One (1) LMS baghouse dust loading silo equipped with a bin vent filter, or equivalent, for material recovery and particulate matter control. The emissions from the LMS dust handling equipment shall also be controlled by the silo bin vent filter. Nucor may install an equivalent, enclosed system to store dust from the LMS;

(2) Dumping, storage, and transfer operations of raw materials for the strip caster plant;

(3) Additional transport on new and existing paved roadways and parking lots, unpaved roadways, and unpaved areas around existing raw material storage piles;

(4) One (1) contact cooling tower system with **six (6) cells and** a maximum water flow rate of 12,000 gallons per minute and one (1) noncontact cooling tower system with **four (4) cells and** a maximum water flow rate of 12,000 gallons per minute; and

(5) One (1) gas plant that supplies oxygen, nitrogen, hydrogen and argon gases to the strip caster operations.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

All other conditions of the permit shall remain unchanged and in effect. Please find enclosed an entire

revised PSD permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Walter Habeeb, at (800) 451-6027, press 0 and ask for Walter Habeeb or dial (317) 232-8422.

Sincerely,
Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
WVH
cc: File - Montgomery County
U.S. EPA, Region V
Air Compliance Section Inspector Richard Sekula
Compliance Data Section - Karen Nowak
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner

PART 70 SIGNIFICANT SOURCE MODIFICATION
and
PREVENTION OF SIGNIFICANT DETERIORATION
OFFICE OF AIR QUALITY

Nucor Steel
RR 2, Box 311, County Road 400 East
Crawfordsville, Indiana 47933

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2-1.1, 326 IAC 2-2, 40 CFR 52.780 and 40 CFR 124, and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 107-12143-00038	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 19, 2001 Expiration Date: January 19, 2006

First Administrative Amendment No.: 107-14935-00038	
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 20, 2001

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a steel mill.

Responsible Official:	John J. Ferriola
Source Address:	RR 2, Box 311, County Road 400 East, Crawfordsville, IN 47933
Mailing Address:	RR 2, Box 311, County Road 400 East, Crawfordsville, IN 47933
Phone Number:	765-364-1323
SIC Code:	3312
County Location:	Montgomery
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD Major Source pursuant to Section 112 of the Clean Air Act One of 28 Listed Categories

A.2 Emission Units and Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) A strip caster line rated at a maximum steel production rate of 135 tons per hour:

(1) One (1) ladle metallurgy station (LMS) identified as LMS-2. The LMS shall be equipped with a side draft hood that has a particulate matter capture efficiency of 99 percent. The captured particulate matter in the gas stream shall be controlled by the LMS baghouse and the gas stream shall be exhausted through the LMS baghouse stack identified as S-20. The remaining uncontrolled emissions shall be exhausted through the LMS roof monitor identified as S-21;

(2) One (1) tundish that feeds the molten metal from the LMS ladle to one (1) continuous strip caster. The continuous strip caster shall be equipped with a canopy hood that has a particulate matter capture efficiency of 98 percent. The captured particulate matter in the gas stream shall be controlled by the LMS baghouse and the gas stream shall be exhausted though the LMS baghouse stack identified as S-20. The remaining uncontrolled emissions shall be exhausted through the LMS roof monitor identified as S-21;

(3) Two (2) hot rolling stands. These stands roll the steel strips from the continuous strip caster to the desired gauge. Fugitive particulate emissions from this process are suppressed by the application of water to the steel strips;

(4) Descaling operations utilizing water to remove scale from the steel strip;

(5) Two (2) coilers. After the strip passes the rolling mill it is then rolled into coils.

Fugitive particulate emissions from this process are suppressed by the application of water to the steel coils.

The strip caster line accepts molten steel at a maximum rate of 135 tons per hour from the existing electric arc furnace (EAF) and is capable of producing all grades of carbon, low-carbon, alloy, and stainless steel at various widths and thicknesses. The coiled product from the strip caster may be shipped directly to the market or may be routed through the existing hot and/or cold mill.

(b) Combustion equipment associated with the strip caster plant:

(1) Two (2) natural gas-fired ladle preheaters identified as LP-1 and LP-2 and one (1) natural gas-fired ladle dryer identified as LD-1. Each ladle preheater and dryer shall be equipped with low-NOx burners, shall not exceed a maximum heat input rate of 12 MMBtu per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21;

(2) Two (2) natural gas-fired tundish preheaters identified as TP-1 and TP-2. Each tundish preheater shall be equipped with oxy-fuel burners, shall not exceed a maximum heat input rate of 10 MMBtu per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21;

(3) Two (2) natural gas-fired tundish nozzle preheaters identified as TNP-1 and TNP-2. Each tundish nozzle preheater shall be equipped with low-NOx burners, shall not exceed a maximum heat input rate of 1.0 MMBtu per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21;

(4) One (1) natural gas-fired tundish dryer identified as TD-1. The tundish dryer shall be equipped with low-NOx burners and shall not exceed a maximum heat input rate of 4 MMBtu per hour, and have the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21; and

(5) Two (2) natural gas-fired transition piece preheaters, utilizing propane as back up fuel. Each preheater shall be equipped with low-NOx burners and not exceed a total heat input capacity of 2 MMBtu per hour. These preheaters shall be used in the tundish operations.

(c) Ancillary equipment associated with the strip caster plant:

(1) One (1) LMS baghouse dust loading silo equipped with a bin vent filter, or equivalent, for material recovery and particulate matter control. The emissions from the LMS dust handling equipment shall also be controlled by the silo bin vent filter. Nucor may install an equivalent, enclosed system to store dust from the LMS;

(2) Dumping, storage, and transfer operations of raw materials for the strip caster plant;

(3) Additional transport on new and existing paved roadways and parking lots,

unpaved roadways, and unpaved areas around existing raw material storage piles;

(4) One (1) contact cooling tower system with six (6) cells and a maximum water flow rate of 12,000 gallons per minute and one (1) noncontact cooling tower system with four (4) cells and a maximum water flow rate of 12,000 gallons per minute; and

(5) One (1) gas plant that supplies oxygen, nitrogen, hydrogen and argon gases to the strip caster operations.

(d) One (1) additional natural gas-fired ladle preheater to the existing meltshop, identified as LP-4. This preheater shall be equipped with low-NOx burners, shall not exceed a maximum heat input capacity of 15 MMBtu per hour, and has the capability to utilize propane as a backup fuel. The existing melt shop building will also be expanded in size, there is no emission increase due to this building expansion.

(e) One (1) continuous blasting system:

(1) One (1) prototype continuous blasting unit. The blasting unit has a maximum steel processing rate of 400 feet per minute. The blasting unit shall be equipped with a cyclone for material recovery and particulate emissions from the blasting system shall exhaust through one (1) baghouse and baghouse stack identified as S-22. The baghouse stack exhausts inside the cold mill building and roof monitor, identified as S-28, will also be constructed;

(2) One (1) storage silo. The silo is equipped with a bin vent filter for material recovery and has a maximum storage capacity of 1000 cubic feet; and

(3) Changes to pickle line number 2 include change in the electrical control system and the addition or replacement of an exit end crop shear and side trimmers, an exit end scrap conveyor, an exit end pinch roll/steering unit, an exit end five roll semi bridle/pinch rolls, an exit Fife centering guide system and mechanical side guides. All would be sized consistently with the present front and exit end equipment (up to 80- inch wide), which is also consistent with the strip caster maximum width.

The blasting system cleans the steel strip and shall be in series with the existing pickle line identified as PL-2. This system can handle the products from both the existing continuous caster line and the continuous strip caster line to be installed as described above.

(f) Eighteen (18) natural gas-fired batch annealing furnaces, utilizing propane as a backup fuel. Each batch annealing furnace shall be equipped with low-NOx burners and shall not exceed a maximum heat input rate of 4.8 MMBtu per hour. These units can handle the product from both the existing continuous caster line and the continuous strip caster line to be installed as described above.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because it is a major source, as defined in 326 IAC 2-7-1(22).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 General Construction Conditions

(a) This approval is based on the data and information submitted by the Permittee. Any change in the design or operation of the plant that could increase emissions or change applicable air pollution control requirements may require that the approval be amended in accordance with 326 IAC 2 as set forth in condition B.5 of this approval.

(b) This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

(c) Notwithstanding Construction Condition B.5, all requirements and conditions of this approval shall remain in effect unless modified in a manner consistent with procedures established for modifications pursuant to 326 IAC 2 (Permit Review Rules).

(d) When the facility is constructed and placed into operation, the operation conditions required by Section C and Section D shall be met.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit

Pursuant to 40 CFR Parts 124.15, 124.19 and 124.20, the effective date of this approval will be thirty (30) days from its issuance if comments are received. Three (3) days shall be added to the thirty (30) day period, if service of notice is by mail. If no public comments are received, then the approval shall be effective immediately upon issuance.

B.4 Revocation of Permits [326 IAC 2-2-8]

Pursuant to 326 IAC 2-2-8(a)(1), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of eighteen (18) months or more.

B.5 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

(e) In the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

(1) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.

(2) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Title V permit at the time of issuance.

(3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Title V permit, and the Title V permit will issued after EPA review.

B.6 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) upon operation. The PMP shall include the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any emissions limitation.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to

the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, or in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that an emission unit vented to a pollution control device is in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after

achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

All monitoring and record keeping requirements shall be implemented upon startup. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.9 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.10 Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the continuous opacity monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(b) In the case of continuous opacity monitoring, whenever the continuous opacity monitor is malfunctioning or will be down for repairs or adjustments for a period of four (4) hours or more, visible emission readings should be performed in accordance with 40 CFR 60, Appendix A, Method 9, beginning four (4) hours after the start of the malfunction or down time for a minimum of one (1) hour.

(c) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.

(d) Method 9 opacity readings shall repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.

(e) The opacity readings during this period shall be reported in the quarterly Compliance Monitoring Reports, unless there are ANY observed six minute averaged exceedances, in which case, these shall be reported to the air compliance inspector within four (4) working hours.

(f) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary opacity monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.11 Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a fan amperage, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.12 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRPs shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The Permittee shall prepare and implement the CRPs upon operation, as defined in Condition C.5. The CRPs are comprised of:

(A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.

(c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied;

(3) An automatic measurement was taken when the process was not operating;

(4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.

(f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.14 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented upon startup.

C.15 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission

required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) A strip caster line rated at a maximum steel production rate of 135 tons per hour:

(1) One (1) ladle metallurgy station (LMS) identified as LMS-2. The LMS shall be equipped with a side draft hood that has a particulate matter capture efficiency of 99 percent. The captured particulate matter in the gas stream shall be controlled by the LMS baghouse and the gas stream shall be exhausted through the LMS baghouse stack identified as S-20. The remaining uncontrolled emissions shall be exhausted through the LMS roof monitor identified as S-21;

(2) One (1) tundish that feeds the molten metal from the LMS ladle to one (1) continuous strip caster. The continuous strip caster shall be equipped with a canopy hood that has a particulate matter capture efficiency of 98 percent. The captured particulate matter in the gas stream shall be controlled by the LMS baghouse and the gas stream shall be exhausted though the LMS baghouse stack identified as S-20. The remaining uncontrolled emissions shall be exhausted through the LMS roof monitor identified as S-21;

(3) Two (2) hot rolling stands. These stands roll the steel strip from the continuous strip caster to the desired gauge. Fugitive particulate emissions from this process are suppressed by the application of water to the steel strip;

(4) Descaling operations utilizing water to remove scale from steel strip; and

(5) Two (2) coilers. After the strip passes the rolling mill it is then rolled into coils. Fugitive particulate emissions from this process are suppressed by the application of water to the steel coils.

The strip caster line accepts molten steel at a maximum rate of 135 tons per hour from the existing electric arc furnace (EAF) and is capable of producing all grades of carbon, low-carbon, alloy, and stainless steel at various widths and thicknesses. The coiled product from the strip caster may be shipped directly to the market or may be routed through the existing hot and/or cold mill.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Particulate Matter (PM and PM_{10}) Emission Limitations

(a) Pursuant to 326 IAC 2-2 (PSD Requirements), the strip caster line shall comply with the following requirements.

(1) The ladles associated with the strip caster shall be covered with lids which shall be closed at all times when transporting molten metal in the ladles, in order to minimize uncontrolled emissions.

(2) The LMS shall be equipped with a side draft hood that evacuates particulate fumes from the LMS to the LMS baghouse. The side draft hood shall have a minimum capture efficiency of 99 percent.

(3) The tundish and continuous strip caster shall be controlled by a canopy hood that evacuates particulate fumes to the LMS baghouse. The hood shall have a minimum capture efficiency of 98 percent.

(4) The filterable PM**/**PM_{10} emissions from the LMS baghouse shall not exceed 0.0018 grains per dry standard cubic feet (gr/dscf) at a maximum volumetric air flow rate of 200,000 dry standard cubic feet per minute.

(5) The filterable and condensible PM/PM_{10} emissions from the LMS baghouse shall not exceed 0.0052 gr/dscf at a maximum volumetric air flow rate of 200,000 dry standard cubic feet per minute.

(6) The opacity from the LMS baghouse stack (S-20) and the LMS roof monitor (S-21) shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9). This limitation satisfies the opacity limitations required by 326 IAC 5-1 (Opacity Limitations).

(b) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Process Operations, the filterable PM emissions from the strip caster process line shall not exceed 54.3 pounds per hour when operating at the maximum process weight rate of 135 tons of steel per hour.

The pounds per hour limitation was calculated using the following equation:

$E = 55.0P^{0.11} - 40$ where: E = Rate of emissions in pounds per hour; and P = Process weight rate in tons per hour.

The above equation shall be used for extrapolation of the data for process weight rates in excess of 60,000 pounds per hour.

D.1.2 Nitrogen Oxide (NOx) Emission Limitation

Pursuant to 326 IAC 2-2 (PSD Requirements), the LMS shall not exceed 0.0176 pounds NOx per ton of steel produced.

D.1.3 Carbon Monoxide (CO) Emission Limitation

Pursuant to 326 IAC 2-2 (PSD Requirements), the LMS shall not exceed 0.07125 pound of CO per ton of steel produced and 9.62 pounds of CO per hour.

D.1.4 Sulfur Dioxide (SO2) Emission Limitation

Pursuant to 326 IAC 2-2 (PSD Requirements), the LMS shall not exceed 0.185 pounds SO2 per ton of steel produced.

D.1.5 Lead (Pb) Emission Limitation

To avoid the requirements of 326 IAC 2-2 (PSD Requirements), the LMS shall not exceed 0.136 pound of Pb per hour.

D.1.6 Operation Limitations

Pursuant to 326 IAC 2-2 (PSD Requirements), the strip caster line shall not exceed a maximum steel throughput of 135 tons per hour. The Permittee shall demonstrate compliance with this production limit based on a consecutive 12-month period.

D.1.7 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the particulate capture and control systems associated with the LMS, tundish and continuous strip caster.

Compliance Determination and Monitoring

D.1.8 Performance Testing

(a) Pursuant to 326 IAC 2-1.1-11 and 326 IAC 2-2, the Permittee shall perform filterable and condensible PM/PM_{10} , NOx, CO, SO2, and Pb compliance stack tests for the LMS baghouse stack (S-20) within 60 days after achieving maximum capacity, but no later than 180 days after initial start-up.

(b) Pursuant to 326 IAC 2-1.1-11 and 326 IAC 2-2, the Permittee shall perform opacity compliance stack tests for the LMS baghouse stack (S-20) and the LMS roof monitor (S-21) within 60 days after achieving maximum capacity, but no later than 180 days after initial start-up.

(c) Opacity tests shall be performed concurrently with the particulate compliance stack test for the LMS baghouse stack, unless meteorological conditions require rescheduling the opacity tests to another date.

(d) All compliance stack tests shall be repeated at least annually until such time that the Part 70 permit for this source is in effect.

(e) IDEM, OAQ retains the authority under 326 IAC 2-1-4(f) to require the Permittee to perform additional and future compliance testing as necessary.

IDEM, OAQ retains the authority under 326 IAC 2-1-4(f) to require the Permittee to perform additional and future compliance testing as necessary.

D.1.9 Visible Emissions Notations

(a) Daily visible emission notations of the LMS baghouse stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.10 Parametric Monitoring for the Baghouse, Side Draft Hood, and Canopy Hood

(a) The Permittee shall record the total static pressure drop across the LMS baghouse, at least once per shift when the associated LMS or continuous strip caster is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the most recent compliant stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above-mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(b) The Permittee shall record the fan amperes of LMS baghouse fan at least once per shift. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the fan amperes of the capture and control system shall be maintained within plus or minus 15% of the rate established during the most recent compliant stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the fan amperes are more than 15% above or below the above-mentioned rate for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the fan amperes shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.11 Baghouse Inspections

An inspection of the LMS baghouse bags shall be performed each calendar quarter and all defective bags replaced. A record shall be kept of the results of the inspection and the number of bags replaced.

D.1.12 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations

may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Recordkeeping and Reporting Requirements

D.1.13 Recordkeeping Requirement

(a) The Permittee shall maintain records of the performance tests required by Operation Condition D.1.8 to demonstrate compliance with Operation Conditions D.1.1, D.1.2, D.1.3, D.1.4, and D.1.5.

(b) The Permittee shall maintain records of the parameters stated in Operation Conditions D.1.6, D.1.9, D.1.10, D.1.11, and D.1.12 to demonstrate compliance with Operation Condition D.1.1.

D.1.14 Reporting Requirements

(a) The Permittee shall submit performance test protocols and performance test reports required by Operation Condition D.1.8 in accordance with the reporting requirements established in Section C - Performance Testing and Section C - General Reporting Requirements, to demonstrate compliance with Operation Conditions D.1.1, D.1.2, D.1.3, D.1.4, and D.1.5.

(b) A quarterly summary of the information to document compliance with Condition D.1.6 shall be submitted using the reporting forms located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. These reports require a certification by the responsible official.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(b) Combustion equipment associated with the strip caster plant:

(1) Two (2) natural gas-fired ladle preheaters identified as LP-1 and LP-2 and one (1) natural gas-fired ladle dryer identified as LD-1. Each ladle preheater and dryer shall be equipped with low-NOx burners, shall not exceed a maximum heat input rate of 12 MMBtu per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21;

(2) Two (2) natural gas-fired tundish preheaters identified as TP-1 and TP-2. Each tundish preheater shall be equipped with oxy-fuel burners, shall not exceed a maximum heat input rate of 10 MMBtu per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21;

(3) Two (2) natural gas-fired tundish nozzle preheaters identified as TNP-1 and TNP-2. Each tundish nozzle preheater shall be equipped with low-NOx burners, shall not exceed a maximum heat input rate of 1 MMBtu per hour, and has the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21;

(4) One (1) natural gas-fired tundish dryer identified as TD-1. The tundish dryer shall be equipped with low-NOx burners, and shall not exceed a maximum heat input rate of 4 MMBtu per hour, and have the capability to utilize propane as a backup fuel. Combustion emissions exhaust to either the LMS baghouse stack identified as S-20 or the LMS roof monitor identified as S-21; and

(5) Two (2) natural gas-fired transition piece preheaters, utilizing propane as back up fuel. Each preheater shall be equipped with low-NOx burners and not exceed a total heat input capacity of 2 MMBtu per hour. These preheaters shall be used in the tundish operations located on the caster deck.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Nitrogen Oxides (NO_X) Emission Limitations

(a) Pursuant to 326 IAC 2-2 (PSD Requirements), the above-mentioned combustion units shall comply with the following requirements:

(1) Each combustion facility shall utilize natural gas as the primary fuel and may utilize propane as a backup fuel; and

(2) The combustion facilities shall comply with the following:

Combustion Facility	No. Units	Max Heat Input Rate (MMBtu/hr)	Burner Type (or equivalent)	NOx Emission Limit (lb NOx/MMBtu)
Ladle Preheater	2	12 each	Low-NOx	0.10
Ladle Dryer	1	12	Low-NOx	0.10
Tundish Preheater	2	10 each	Oxy-Fuel	0.15
Tundish Nozzle Preheater	2	1 each	Low-NOx	0.10
Tundish Dryer	1	4	Low-NOx	0.10
Transition Piece Preheaters	2	2 each	Low-NOx	0.10

D.2.2 Particulate (PM and PM_{10}), Carbon Monoxide (CO), and Sulfur Dioxide (SO_2) Emission Limitations

Pursuant to 326 IAC 2-2 (PSD Requirements), the above-mentioned combustion units shall utilize natural gas as the primary fuel and may utilize propane as a backup fuel.

Compliance Determination and Monitoring

D.2.3 Performance Testing

Testing of the above-mentioned facilities is not required at this time. However, IDEM, OAQ retains the authority under 326 IAC 2-1-4(f) to require the Permittee to perform future compliance testing as necessary.

D.2.4 Vendor Certification

The Permittee shall submit with the affidavit of construction (Condition B.5(a)) all vendor guarantees of the above-mentioned combustion units to demonstrate compliance with Operation Conditions D.2.1(a)(1) and (2).

Recordkeeping and Reporting Requirements

D.2.5 Recordkeeping Requirement

The Permittee shall maintain records of the parameters stated in Operation Condition D.2.4 to demonstrate compliance with Operation Condition D.2.1(a)(1) and (2).

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(c) Ancillary equipment associated with the strip caster plant:

(1) One (1) LMS baghouse dust loading silo equipped with a bin vent filter, or equivalent, for material recovery and particulate matter control. The emissions from the LMS dust handling equipment shall also be controlled by the silo bin vent filter. Nucor may install an equivalent, enclosed system to store dust from the LMS;

(2) Dumping, storage, and transfer operations of raw materials for the strip caster plant;

(3) Additional transport on new and existing paved roadways and parking lots, unpaved roadways, and unpaved areas around existing raw material storage piles;

(4) One (1) contact cooling tower system with six (6) cells and a maximum water flow rate of 12,000 gallons per minute and one (1) noncontact cooling tower system with four (4) cells and a maximum water flow rate of 12,000 gallons per minute; and

(5) One (1) gas plant that supplies oxygen, nitrogen, hydrogen and argon gases to the strip caster operations.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.3.1 Particulate Matter (PM and PM_{10}) Emission Limitations

(a) Pursuant to 326 IAC 2-2 (PSD Requirements), the LMS baghouse dust loading silo shall comply with the following requirements:

(1) The LMS baghouse dust loading silo shall be equipped with a bin vent;

(2) The filterable PM/PM_{10} emissions from the LMS baghouse dust loading silo shall not exceed 0.01 gr/dscf at a maximum volumetric air flow rate of 100 standard cubic feet per minute; and

(3) The opacity from the LMS baghouse dust loading silo shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9). This limitation satisfies the opacity limitations required by 326 IAC 5-1 (Opacity Limitations).

(b) Pursuant to 326 IAC 2-2 (PSD Requirements), the emissions from dumping, storage, and transfer operations of raw materials shall not exceed five percent (5%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9). This limitation satisfies the opacity limitations required by 326 IAC 5-1 (Opacity Limitations).

(c) Pursuant to 326 IAC 2-2 (PSD Requirements), the paved surface silt loading shall not

exceed 16.8 pounds of silt per mile and the average instantaneous opacity from paved roadways and parking lots shall not exceed ten percent (10%). The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

(1) The first reading will be taken at the time of emission generation;

(2) The second reading will be taken five (5) seconds later; and

(3) The third reading will be taken five (5) seconds later or ten (10) seconds after the first reading.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet, but no more than one-fourth (1/4) mile, from the plume and as close to approximately right angles to the plume as permissible under EPA Reference Method 9. Each reading shall be taken approximately four (4) feet above the surface of the paved roadway.

(d) Pursuant to 326 IAC 2-2 (PSD Requirements), the visible emissions from unpaved roadways and unpaved areas around raw material storage piles shall not exceed an average instantaneous opacity of ten percent (10%). The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

(1) The first reading will be taken at the time of emission generation;

(2) The second reading will be taken five (5) seconds later; and

(3) The third reading will be taken five (5) seconds later or ten (10) seconds after the first reading.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet, but no more than one-fourth (1/4) mile, from the plume and as close to approximately right angles to the plume as permissible under EPA Reference Method 9. Each reading shall be taken approximately four (4) feet above the surface of the unpaved roadway.

(e) Pursuant to 326 IAC 2-2 (PSD Requirements), the two (2) cooling towers shall be equipped with drift eliminators to minimize particulate emissions. The noncontact cooling tower shall not exceed a water flow rate of 12,000 gallons of water per minute, and the contact cooling tower shall not exceed a water flow rate of 12,000 gallons of water per minute.

D.3.2 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the bin vent filter to the LMS baghouse dust loading silo.

Compliance Determination and Monitoring

D.3.3 Performance Testing

Testing of the above-mentioned facilities is not required at this time. However, IDEM, OAQ retains the authority under 326 IAC 2-1-4(f) to require the Permittee to perform future compliance testing as necessary.

D.3.4 Visible Emissions Notations

(a) Weekly visible emission notations of the bin vent to the LMS baghouse dust loading silo shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.3.5 Bin Vent Filter Inspections

An inspection of the bin vent filter to the LMS baghouse silo shall be performed each calendar quarter. A defective filter shall be replaced and a record shall be kept of the results of the inspection.

D.3.6 Broken or Failed Bin Vent Filter Detection

In the event that filter failure of the bin vent has been observed, the failed unit and its associated process will be shut down immediately until the failed unit have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Recordkeeping and Reporting Requirements

D.3.7 Recordkeeping Requirement

The Permittee shall maintain records of the parameters stated in Operation Conditions D.3.4, D.3.5, and D.3.6 to demonstrate compliance with PSD requirements.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(d) One (1) additional natural gas-fired ladle preheater to the existing meltshop, identified as LP-4. This preheater shall be equipped with low-NOx burners, shall not exceed a maximum heat input capacity of 15 MMBtu per hour, and has the capability to utilize propane as a backup fuel. The existing melt shop building will also be expanded in size, there is no emission increase due to this building expansion.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.4.1 Nitrogen Oxides (NO_X) Emission Limitations

Pursuant to 326 IAC 2-2 (PSD Requirements), the above-mentioned additional ladle preheater to the existing LMS shall comply with the following requirements:

(a) The ladle preheater shall be equipped with low-NOx burners;

(b) The ladle preheater shall utilize natural gas as the primary fuel and may utilize propane as a backup fuel; and

(c) The NOx emissions from the ladle preheater shall not exceed 0.10 pounds per MMBtu.

D.4.2 Particulate (PM and PM_{10}), CO, and Sulfur Dioxide (SO_2) Emission Limitations

Pursuant to 326 IAC 2-2 (PSD Requirements), the above-mentioned additional ladle preheater to the existing LMS shall utilize natural gas as the primary fuel and may utilize propane as a backup fuel.

Compliance Determination and Monitoring

D.4.3 Performance Testing

Testing of the above-mentioned facilities is not required at this time. However, IDEM, OAQ retains the authority under 326 IAC 2-1-4(f) to require the Permittee to perform future compliance testing as necessary.

D.4.4 Vendor Certification

The Permittee shall submit with the affidavit of construction (Condition B.5(a)) the vendor guarantee for the above-mentioned ladle preheater to demonstrate compliance with Operation Conditions D.4.1(a) and (c).

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(e) One (1) continuous blasting system:

(1) One (1) prototype continuous blasting unit. The blasting unit has a maximum steel processing rate of 400 feet per minute. The blasting unit shall be equipped with a cyclone for material recovery and particulate emissions from the blasting system shall exhaust through one (1) baghouse and baghouse stack identified as S-22. The baghouse stack exhausts inside the cold mill and roof monitor, identified as S-28, will also be constructed;

(2) One (1) storage silo. The silo is equipped with a bin vent filter for material recovery and has a maximum storage capacity of 1000 cubic feet; and

(3) Changes to pickle line number 2 include change in the electrical control system and the addition or replacement of an exit end crop shear and side trimmers, an exit end scrap conveyor, an exit end pinch roll/steering unit, an exit end five roll semi bridle/pinch rolls, an exit Fife centering guide system and mechanical side guides. All would be sized consistently with the present front and exit end equipment (up to 80-inch wide), which is also consistent with the strip caster maximum width.

The blasting system cleans the steel strip and shall be in series with the existing pickle line identified as PL-2. This system can handle the products from both the existing continuous caster line and the continuous strip caster line to be installed as described above.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.5.1 Particulate Matter (PM and PM_{10}) Emission Limitations

(a) Pursuant to 326 IAC 2-2 (PSD Requirements), the continuous blasting unit shall comply with the following requirements:

(1) The continuous blasting unit shall be equipped with one (1) cyclone for product recovery and one (1) baghouse for particulate matter control;

(2) The filterable and condensibles PM/PM_{10} emissions from the continuous blasting unit baghouse shall not exceed 0.003 grains per dry standard cubic feet (gr/dscf) at a maximum volumetric air flow rate of 36,000 standard cubic feet per minute;

(3) The opacity from the cold mill building containing the continuous blasting unit baghouse shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9). This limitation satisfies the opacity limitations required by 326 IAC 5-1 (Opacity Limitations).

(b) Pursuant to 326 IAC 2-2 (PSD Requirements), the storage silo shall comply with the

following requirements:

(1) The storage silo shall be equipped with one (1) bin vent for product recovery and particulate matter control;

(2) The filterable PM**/**PM_{10} emissions from the storage silo bin vent shall not exceed 0.01 grains per dry standard cubic feet (gr/dscf) at a maximum volumetric air flow rate of 1,000 standard cubic feet per minute; and

(3) The opacity from the cold mill building containing the storage silo bin vent shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9). This limitation satisfies the opacity limitations required by 326 IAC 5-1 (Opacity Limitations).

(c) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Process Operations, the filterable PM emissions from the continuous blasting system shall not exceed 48.6 pounds per hour when operating at the maximum process weight rate of 75 tons of steel per hour and blasting rate of 1 ton per hour.

The pounds per hour limitation was calculated using the following equation:

$E = 55.0P^{0.11} - 40$ where: E = Rate of emissions in pounds per hour; and
P = Process weight rate in tons per hour.

The above equation shall be used for extrapolation of the data for process weight rates in excess of 60,000 pounds per hour.

D.5.2 Operation Limitations

Pursuant to 326 IAC 2-2 (PSD Requirements), it is prohibitive to utilize the pickle line and the continuous blasting system in a parallel arrangement.

D.5.3 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the cyclone and baghouse to the continuous blasting unit and for the bin vent filter to the storage silo.

Compliance Determination and Monitoring:

D.5.4 Performance Testing

(a) Pursuant to 326 IAC 2-1.1-11 and 326 IAC 2-2, the Permittee shall perform filterable and condensible PM/PM10 compliance stack tests for the continuous blasting unit stack (S-22) within 60 days after achieving maximum capacity, but no later than 180 days after initial start-up.

(b) Pursuant to 326 IAC 2-1.1-11 and 326 IAC 2-2, the Permittee shall perform opacity tests of the Cold Mill building while the continuous blasting unit is operating within 60 days after achieving maximum capacity, but no later than 180 days after initial start-up.

(c) Opacity tests shall be performed concurrently with the particulate compliance stack test for the continuous blasting unit, unless meteorological conditions require rescheduling the opacity tests to another date.

(d) IDEM, OAQ retains the authority under 326 IAC 2-1-4(f) to require the Permittee to perform additional and future compliance testing as necessary.

D.5.5 Visible Emissions Notations

(a) Weekly visible emission notations of the baghouse stack to the continuous blasting unit and the bin vent to the silo shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.5.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse to the continuous blasting unit at least once per shift when the associated blasting process is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 and 10.0 inches of water or a range established during the most recent compliant stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. The instrument used for determining the pressure shall comply with Condition C.10 (Pressure Gauge and Other Instrument Specifications) of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.5.7 Baghouse and Bin Vent Filter Inspections

An inspection of the bin vent filter to the silo and the baghouse to the continuous blasting unit shall be performed each calendar quarter. Defective bag(s) and filter(s) shall be replaced. The Permittee shall keep records of the results of the inspection.

D.5.8 Broken or Failed Bin Vent Filter Detection

(a) In the event that filter failure of the bin vent has been observed, the failed unit and its associated process will be shut down immediately until the failed unit have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) In the event that bag failure in the baghouse has been observed, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Recordkeeping and Reporting Requirements

D.5.9 Recordkeeping Requirement

The Permittee shall maintain records of the parameters required by Operation Conditions D.5.4, D.5.5, D.5.6, D.5.7, and D.5.8 to demonstrate compliance with PSD requirements.

D.5.10 Reporting Requirement

The Permittee shall submit performance test protocols and performance test reports required by Operation Conditions D.5.4 in accordance with the reporting requirements established in Section C - Performance Testing and Section C - General Reporting Requirements, to demonstrate compliance with Operation Conditions D.5.1(a)(2) and (3).

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(f) Eighteen (18) natural gas-fired batch annealing furnaces, utilizing propane as a backup fuel. Each batch annealing furnace shall be equipped with low-NOx burners and shall not exceed a maximum heat input rate of 4.8 MMBtu per hour. These units can handle the product from both the existing continuous caster line and the continuous strip caster line to be installed as described above.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.6.1 Nitrogen Oxides (NO_X) and CO Emission Limitations

Pursuant to 326 IAC 2-2 (PSD Requirements), the eighteen (18) batch annealing furnaces shall comply with the following requirements:

(a) Each batch annealing furnace shall be equipped with low-NOx burners;

(b) Each batch annealing furnace shall utilize natural gas as the primary fuel and may utilize propane as a backup fuel;

(c) The NOx emissions from each batch annealing furnace shall not exceed 0.10 pounds per MMBtu; and

(d) The CO emissions from each batch annealing furnace shall not exceed 0.084 pound per MMBtu.

D.6.2 Sulfur Dioxide (SO_2) Emission Limitations

Pursuant to 326 IAC 2-2 (PSD Requirements), the above-mentioned additional batch annealing furnaces shall utilize natural gas as the primary fuel and may utilize propane as a backup fuel.

Compliance Determination and Monitoring

D.6.4 Performance Testing

(a) Pursuant to 326 IAC 2-1.1-11 and 326 IAC 2-2, the Permittee shall perform NOx and CO compliance stack tests on at least four (4) batch annealing furnaces within 60 days after achieving maximum capacity, but no later than 180 days after initial start-up.

(b) All compliance stack tests shall be repeated at least annually until such time that the Part 70 permit for this source is in effect.

(c) IDEM, OAQ retains the authority under 326 IAC 2-1-4(f) to require the Permittee to perform additional and future compliance testing as necessary.

D.6.5 Vendor Certification

The Permittee shall submit with the affidavit of construction (Condition B.5(a)) the vendor guarantees for the above-mentioned batch annealing furnaces to demonstrate compliance with

Operation Conditions D.6.1(a), (c), and (d).

Recordkeeping and Reporting Requirements

D.6.6 Recordkeeping Requirement

The Permittee shall maintain records of the parameters required by Operation Conditions D.6.4 and D.6.5 to demonstrate compliance with Operation Condition D.6.1.

D.6.7 Reporting Requirement

The Permittee shall submit performance test protocols and performance test reports required by Operation Condition D.6.4 in accordance with the reporting requirements established in Section C - Performance Testing and Section C - General Reporting Requirements, to demonstrate compliance with Operation Condition D.6.1(c) and (d).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Nucor Steel
Source Address: RR2, Box 311, County Road 400 East, Crawfordsville, Indiana 47933
Mailing Address: RR2, Box 311, County Road 400 East, Crawfordsville, Indiana 47933
Source Modification No.: 107-12143-00038

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

A certification by the responsible official must be submitted with this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Source Modification Quarterly Reporting Form

Source Name: Nucor Steel
Source Address: RR2, Box 311, County Road 400 East, Crawfordsville, Indiana 47933
Mailing Address: RR2, Box 311, County Road 400 East, Crawfordsville, Indiana 47933
Source Modification No.: 107-12143-00038
Facility: Strip Caster Line
Parameter: Steel Production Limitation
Limit: 135 tons per hour (Compliance Demonstrated by 1,182,600 ton steel production per year limit, based on a consecutive 12-month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Nucor Steel
Source Address: RR2, Box 311, County Road 400 East, Crawfordsville, Indiana 47933
Mailing Address: RR2, Box 311, County Road 400 East, Crawfordsville, Indiana 47933
Source Modification No.: 107-12143-00038

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)
- C The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- C The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.